

REMARKS

The Office Action dated January 26, 2009 has been received and its contents carefully noted. Claims 1-4, 6-9, and 12-13 were pending and are rejected. Claim 12 is hereby canceled. Claims 1 and 13 are amended.

Applicants and the undersigned look forward to continuing to work with Examiner Kackar following the telephonic interviews held on July 16, 2008 and July 24, 2008. We encourage Examiner Kackar to telephone us further in the event that he has any questions concerning the further claim amendments made herein in order to work toward allowance of the claims. Amended claim 1 is submitted as clearly patentably distinguishing over the art asserted of record.

In the January 26, 2009 Action, claims 1-4, 8-9, and 12-13 were rejected under 35 U.S.C. § 103(a) as purportedly obvious over JP2000/021957 (Yoshida) in view of JP2003/2240444 (Nakamura) and U. S. Patent Publication No. 2003/0183341 (Yamaguchi). Claims 6 and 7 individually were rejected. Claim 6 was rejected as purportedly obvious over Yoshida in view of JP11/354526 (Watanabe), while claim 7 was rejected as purportedly obvious over Yoshida and Watanabe, further in view of U. S. Patent No. 6,215,643 (Nagasaki). Each of these rejections is traversed.

As amended, claim 1 recites a combination of structure that is completely absent from the asserted disclosures, irrespective of whether they are considered individually or in combination. As was done in Applicants' previous "Submission" of August 15, 2008, reference will be made to Applicants' structure as exemplified in Fig. 7 of their disclosure.

Amended claim 1 begins with a description of Applicants' "support column". It has a main body corresponding to body 23A in the preferred, exemplary embodiment of Fig. 7. This body has an outer diameter "d" as indicated in the figure. Fig. 7 also shows an imaginary projection of outer diameter "d" in phantom, dot-dash lines that extends upwardly through the flanged upper end portion 23B ("flanged part 23B") of the support column body. A curvilinear transition part is indicated by R₂.

Next, claim 1 describes Applicants' substrate holding table as joined to the flanged part at an annular joint surface 235. This joint surface is the only contact between table 23 and the

support column. As seen in Fig. 7, the annular joint surface has a radial width W' . After briefly introducing the heating mechanism, claim 1 continues in describing the lower surface of table 23 as having annular U-shaped groove 23U. As recited in the claim, and as clearly seen from Fig. 7, groove 23U is located circumferentially outwardly beyond flanged part 23B. However, as claim 1 further requires, inside surface 23U₁ of groove 23U matches outer wall 23B₁ of flange 23B so as to “form a continuous, smooth outermost surface surrounding the joint surface”.

The last paragraph of amended claim 1 introduces and describes Applicants’ second (and much wider) annular groove 232. Claim 1 defines this groove, also in the table lower surface, as “extending radially outwardly from a projection of outer diameter, d, through the flanged part to the annular joint surface”. That is, in Fig. 7, groove 234 extends radially outwardly (at least) from the dot-dash projection (of support column 23A’s outer circumference) all the way to joint surface 235. Hence, as also described in claim 1, second groove 232 “forms a space that separates a substantial portion of the upper surface of the flanged part from the substrate holding table” (emphasis added). Thus, in Fig. 7, it is seen that the presence of second groove 232 greatly reduces the thickness of joint surface 235 to just that indicated by W' in Fig. 7.

None of the asserted art teaches or suggests such a structure as now clarified by amended claim 1. Yoshida has no such interfacing structure defining Applicants’ first and second grooves. Nakamura likewise fails in this regard. The undersigned has greatly magnified Fig. 6 of Nakamura in order to discern that the interior of Nakamura’s flanged part appears to have inclined inner walls similar to Applicants’ inclined walls 23f in Applicants’ Fig. 7 embodiment. However, Nakamura has nothing corresponding to Applicants’ second groove which continues radially outwardly from a projection of the outer circumference of Nakamura’s support column 81 to produce a reduced-width joint surface between the table and the flanged part of the support column. Yamaguchi offers no further teachings in this regard. Likewise, neither Watanabe nor Nagasaki contributes anything towards teaching these distinct requirements of Applicants’ claimed structure.

For at least these reasons, all of the rejections are overcome. Withdrawal thereof respectfully is requested.

CONCLUSION

All of the stated grounds of rejections have been properly traversed, accommodated, or rendered moot. Therefore it is respectfully requested that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for all allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

If any fees under 37 C.F.R. §§ 1.16 or 1.17 are due in connection with this filing, please charge the fees to Deposit Account No. 02-4300; Order No. 033082 M 301.

Respectfully submitted,
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